

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An operation data creating method for creating operation data ~~indicating with respect to each base station other base stations related to each base station, based on a communication quality level with respect to each base station at each local position within a service area~~ in a mobile communication system which includes a plurality of base stations ~~set up within the~~ a service area and a mobile station which makes a wireless communication with the base stations, said operation data creating method comprising the steps of:

creating quality information indicating the communication quality level with respect to each base station at each local position within a cell of the service area;

selecting a first base station having a highest communication quality level at each local position in a subset of local positions within each cell of the service area, based on the created quality information, said subset of local positions including a local position of the mobile station;

selecting base stations having a second highest or subsequent communication quality level which is lower than ~~a highest communication quality level~~ the first base station at each local position where the ~~same base station of interest~~ first base station has the highest communication quality level in the subset of local positions, based on the created quality information ~~with respect to each base station at each local position~~; and

creating the operation data indicating the selected base stations as ~~the other base stations related to the~~ first base station ~~of interest~~ having the highest communication quality level.

Claim 2 (Original): The operation data creating method for the mobile communication system as claimed in claim 1, wherein:

the communication quality level with respect to each base station at each local position within the service area is computed by estimation according to a predetermined algorithm, and the quality information is created based on a computed result.

Claim 3 (Original): The operation data creating method for the mobile communication system as claimed in claim 1, wherein:

the communication quality level with respect to each base station at each local position within the service area is measured, and the quality information is created based on a measured result.

Claim 4 (Currently Amended): The operation data creating method for the mobile communication system as claimed in claim 1, wherein:

one of the base stations having the second or subsequent communication quality level is selected if ~~the~~ a same base station having the second or subsequent communication quality level at a plurality of local positions, when selecting the base stations having the second or subsequent communication quality level at each local position where the ~~same~~ first base station ~~of interest~~ has the highest communication quality level.

Claim 5 (Currently Amended): The operation data creating method for the mobile communication system as claimed in claim 1, comprising the steps of:

creating a list having ~~the~~ a base stations arranged at positions in an order from a highest communication quality level based on the created quality information, with respect to each local position;

selecting base stations located at a second or subsequent position in each list having the ~~same~~ first base station positioned at a first position having the highest order in each list;
and

creating operation data indicating the selected base stations as the other base stations related to the first base station located at the first position having the highest order in each list.

Claim 6 (Currently Amended): The operation data creating method for the mobile communication system as claimed in claim 5, wherein:

the base stations are successively selected from the positions having the higher order in each list, when selecting the base stations located at the second or subsequent position in each list having the ~~same~~ first base station positioned at the first position having the highest order in each list, and

the operation data created indicate the selected base stations as the other base stations related to the first base station at the first position having the highest order in each list, in a state where the selected base stations are arranged in the selected order.

Claim 7 (Currently Amended): The operation data creating method for the mobile communication system as claimed in claim 6, wherein:

score information corresponding to a number of ~~the~~ a same base station located at ~~the~~ a same position in each list is generated, when successively selecting the base stations located at the second or subsequent positions in each list having the ~~same~~ first base station located at the first position having the highest order in each list, from the base stations located at positions having the higher order in each list, and

the operation data created ~~indicate~~ indicates the selected base stations as the other base stations related to the first base station at the first position having the highest order in each list, in a state where the score information is made to correspond to the same base station located at the same position in each list.

Claim 8 (Currently Amended): An operation data creating apparatus for creating operation data ~~indicating with respect to each base station other base stations related to each base station, based on a communication quality level with respect to each base station at each local position within a service area~~ in a mobile communication system which includes a plurality of base stations ~~set up within the~~ a service area and a mobile station which makes a wireless communication with the base stations, said apparatus comprising:

quality information creating means for creating quality information indicating the communication quality level with respect to each base station at each local position within a cell of the service area;

first base station selecting means for selecting a first base station having a highest communication quality level at each local position in a subset of local positions within the service area, based on the created quality information, said subset of local positions including a local position of the mobile station;

~~related-base station selecting means for selecting base stations having a second highest or subsequent communication quality level which is lower than a highest communication quality level~~ the first base station at each local position where the ~~same base station of interest~~ first base station has the highest communication quality level in the subset of local positions, based on the created quality information ~~with respect to each base station at each local position~~; and

creating means for creating the operation data indicating the selected base stations as ~~the other~~ base stations related to the first base station ~~of interest~~ having the highest communication quality level.

Claim 9 (Original): The operation data creating apparatus for the mobile communication system as claimed in claim 8, wherein:

said quality information creating means includes computing means for computing by estimation the communication quality level with respect to each base station at each local position within the service area according to a predetermined algorithm, and creates the quality information based on a computed result of the computing means.

Claim 10 (Original): The operation data creating apparatus for the mobile communication system as claimed in claim 8, wherein:

said quality information creating means measures the communication quality level with respect to each base station at each local position within the service area, and creates the quality information based on a measured result.

Claim 11 (Currently Amended): The operation data creating apparatus for the mobile communication system as claimed in claim 8, wherein:

said ~~related~~ base station selecting means selects one of the base stations having the second or subsequent communication quality level if ~~the a~~ same base station has the second or subsequent communication quality level at a plurality of local positions, when selecting the base stations having the second or subsequent communication quality level at each local position where the same first base station ~~of interest~~ has the highest communication quality level.

Claim 12 (Currently Amended): The operation data creating apparatus for the mobile communication system as claimed in claim 8, wherein:

said ~~related~~ base station selecting means includes list creating means for creating a list having ~~the~~ base stations arranged at positions in an order from a highest communication quality level based on the created quality information, with respect to each local position,

base stations located at a second or subsequent position in each list having the ~~same~~ first base station positioned at a first position having the highest order in each list are selected, and

operation data indicating the selected base stations as the other base stations related to the first base station located at the first position having the highest order in each list are created.

Claim 13 (Currently Amended): The operation data creating apparatus for the mobile communication system as claimed in claim 12, wherein:

said ~~related~~ base station selecting means successively selects the base stations from the positions having the higher order in each list, when selecting the base stations located at the second or subsequent position in each list having the ~~same~~ first base station positioned at the first position having the highest order in each list, and

the operation data indicating the selected base stations as the other base stations related to the first base station at the first position having the highest order in each list, in a state where the selected base stations are arranged in the selected order, are created.

Claim 14 (Currently Amended): The operation data creating apparatus for the mobile communication system as claimed in claim 13, wherein:

said ~~related~~ base station selecting means includes score information generating means for generating score information corresponding to a number of ~~the~~ a same base station located at ~~the~~ a same position in each list, when successively selecting the base stations located at the second or subsequent positions in each list having the ~~same~~ first base station located at the first position having the highest order in each list, from the base stations located at positions having the higher order in each list, and

the operation data indicating the selected base stations as the other base stations related to the first base station at the first position having the highest order in each list, in a state where the score information is made to correspond to the same base station located at the same position in each list, are created.

Claim 15 (Currently Amended): A computer-readable storage medium which stores a program for causing a computer to carry out a process of creating operation data ~~indicating with respect to each base station other base stations related to each base station, based on a communication quality level with respect to each base station at each local position within a service area~~ in a mobile communication system which includes a plurality of base stations ~~set up within the~~ a service area and a mobile station which makes a wireless communication with the base stations, said program comprising:

a quality information creating procedure which causes the computer to create quality information indicating the communication quality level with respect to each base station at each local position within a cell of the service area;

a first base station selecting procedure which causes the computer to select a first base station having a highest communication quality level at each local position in a subset of local positions within each cell of the service area, based on the created quality information, said subset of local positions including a local position of the mobile station;

a ~~related~~ base station selecting procedure which causes the computer to select base stations having a second highest or subsequent communication quality level which is lower than a ~~highest communication quality level~~ the first base station at each local position where the ~~same base station of interest~~ first base station has the highest communication quality level in the subset of local positions, based on the created quality information ~~with respect to each base station at each local position~~; and

a creating procedure which causes the computer to create the operation data indicating the selected base stations as ~~the other base stations related to the~~ first base station ~~of interest~~ having the highest communication quality level.

Claim 16 (Original): The computer-readable storage medium as claimed in claim 15, wherein:

said quality information creating procedure includes a computing procedure which causes the computer to compute by estimation the communication quality level with respect to each base station at each local position within the service area according to a predetermined algorithm, and the quality information is created based on a computed result of the computing procedure.

Claim 17 (Original): The computer-readable storage medium as claimed in claim 15, wherein:

said quality information creating procedure causes the computer to measure the communication quality level with respect to each base station at each local position within the service area, and the quality information is created based on a measured result.

Claim 18 (Currently Amended): The computer-readable storage medium as claimed in claim 15, wherein:

said ~~related~~ base station selecting procedure causes the computer to select one of the base stations having the second or subsequent communication quality level in each list if ~~the~~ a same base station has the second or subsequent communication quality level at a plurality of local positions, when selecting the base stations having the second or subsequent communication quality level at each local position where the ~~same~~ first base station has the highest communication quality level in each list.

Claim 19 (Currently Amended): The computer-readable storage medium as claimed in claim 15, wherein:

said ~~related~~ base station selecting procedure includes a list creating procedure which causes the computer to create a list having the base stations arranged at positions in an order from a highest communication quality level based on the created quality information, with respect to each local position,

base stations located at a second or subsequent position in each list having the ~~same~~ first base station positioned at a first position having the highest order in each list are selected, and

operation data indicating the selected base stations as the other base stations related to the first base station located at the first position having the highest order in each list are created.

Claim 20 (Currently Amended): The computer-readable storage medium as claimed in claim 19, wherein:

said ~~related~~ base station selecting procedure causes the computer to successively select the base stations from the positions having the higher order in each list, when selecting the base stations located at the second or subsequent position in each list having the ~~same~~ first base station positioned at the first position having the highest order in each list, and

the operation data indicating the selected

base stations as the other base stations related to the first base station at the first position having the highest order in each list, in a state where the selected base stations are arranged in the selected order, are created.

Claim 21 (Currently Amended): The computer-readable storage medium as claimed in claim 20, wherein:

said ~~related~~ base station selecting procedure includes a score information generating procedure which causes the computer to generate score information corresponding to a number of ~~the~~ a same base station located at ~~the~~ a same position in each list, when successively selecting the base stations located at the second or subsequent positions in each list having the ~~same~~ first base station located at the first position having the highest order in each list, from the base stations located at positions having the higher order in each list, and

the operation data indicating the selected base stations as the other base stations related to the first base station at the first position having the highest order in each list, in a state where the score information is made to correspond to the same base station located at the same position in each list, are created.

Claim 22 (Previously Presented): An operation data creating apparatus for creating operation data ~~indicating with respect to each base station other base stations related to each base station, based on a communication quality level with respect to each base station at each~~

~~local position within a service area~~ in a mobile communication system which includes a plurality of base stations ~~set up within the a~~ service area and a mobile station which makes a wireless communication with the base stations, said apparatus comprising:

a quality information creating part configured to create quality information indicating the communication quality level with respect to each base station at each local position within the service area;

a first base station selecting part configured to select a first base station having a highest communication quality level at each local position in a subset of local positions within the service area, based on the created quality information, said subset of local positions including at least one local position within the service area;

a ~~related~~ base station selecting part configured to select base stations having a second highest or subsequent communication quality level which is lower than ~~a highest communication quality level~~ the first base station at each local position where the ~~same base station of interest~~ first base station has the highest communication quality level in the subset of local positions, based on the created quality information ~~with respect to each base station at each local position~~; and

a creating part configured to create the operation data indicating the selected base stations as the other base stations related to the first base station ~~of interest~~ having the highest communication quality level.